

ABSTRACT

Water vapor is mixed to O<sub>3</sub> gas generated by an ozone generator of discharge type. The mixed fluid is cooled by a cooler, thereby impurities such as metals and nitrogen oxides 5 contained in the O<sub>3</sub> gas dissolve into condensed water. Subsequently, a gas-liquid separator separates the O<sub>3</sub> gas from the condensed water. Water vapor is mixed with the O<sub>3</sub> gas again. The mixed fluid passes through a metal trap composed of a container containing plural silicon chips as a metal 10 adsorbent, thereby to remove the remaining metals therefrom.